

Application No. 09/612,829  
Response to the Office Action Mailed July 5, 2005  
Amendment dated October 5, 2005

### **REMARKS/ARGUMENTS**

#### **Support for the New Claims:**

Claims 19 and 22 are canceled and new independent claim 27 and dependent claims 28-31 are added. Therefore, the pending claims in the application are claims 14-18, 20, 21, and 23-31. Support for the new claims can be found, for example, at least in the original claims, and in the specification, at least at page 3, lines 1- 5 and page 5, lines 2-27.

#### **Rejection of Claims**

Prior to addressing the specific rejections raised in the Office Action mailed July 5, 2005, Applicants reiterate, expand upon, and incorporate by reference the Reply filed May 2, 2005. The arguments made concerning any previously cited art are equally applicable to the same art cited in current Office Action. Furthermore, the rebuttal made by the Examiner at page 16 concerning Applicants' Reply of July 5, 2005 is either moot because of amendments made in the current Reply or overcome based on Applicants' arguments in the current Reply.

In the office action, at page 3, the Examiner rejected claims 14-17, 20, 21, and 24 under 35 U.S.C. § 102(e) as allegedly being anticipated by Adourian et al. (U.S. Patent No. 6,207,031 - hereinafter "the '031 patent"). Applicants respectfully traverse this rejection.

The Examiner notes that the date of the Applicants' application and the '031 patent are the same and therefore the Examiner appears to be relying on the Provisional Application No. 60/058,798 to which the '031 patent claims benefit of priority, in an attempt to use the '031 patent as prior art. Applicants respectfully submit that the provisional application does not

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support the aspects of the '031 patent used against Applicants' claims, and therefore, the '031 patent fails to anticipate Applicants' invention.

Making reference to the priority documents, the Examiner argues that:

Regarding Claim 14, Adourian et al disclose a method of sample handling in a capillary electrophoresis apparatus, comprising: providing a plurality of samples on coordinates of a work surface (Page 18, lines 1-15; Page 9, lines 10-15), wherein the work surface temperature is controlled (Page 18, lines 13-15); simultaneously transferring at least two samples from their respective work-surface coordinates to respective loading wells of a capillary electrophoresis chip (Page 19, lines 17-18; Page 6, line 20 - Page 7, line 20), wherein the wells include a capillary positioned therein (e.g. Figures 1A and 8A; Page 19, line 9 - Page 20, line 1; Page 9, lines 10-24); and injecting the samples from the wells into the capillaries. (Page 19, line 9, lines 20), line 1; Page 9, lines 10-24) Applicants' definition of capillaries includes such microfluidic structures. (Specification Page 5, lines 4 - 8).

Applicants disagree with the Examiner's arguments concerning the disclosure in the priority documents. Several aspects of the claimed invention that the Examiner alleges can be found in Adourian are, in fact, not present in the priority document (hereinafter the '798 application).

For example, the Examiner alleges that in the '798 application, at page 19, lines 17 - 18 and/or page 6, line 20 - page 7, line 20, the '798 application describes, "simultaneously transferring." The first citation referred to actually states that "the samples were briefly vortexed, denatured for 2 minutes at 95° C, chilled on ice and pipetted into the microchip sample vial located at the end of channel A." Clearly, there is no reference to "transferring simultaneously, at least two samples from their respective work surface coordinates to respective loading wells . . ." where the "loading wells

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include a capillary fixedly positioned therein." Again, at pages 6-7, there is also no reference to "simultaneously transferring."

Similarly, the pages that the Examiner refers to in an attempt to support disclosure of "providing a plurality of samples located on a work surface having coordinates" fails to suggest or disclose anything about samples actually at coordinates of a work-surface. Additionally, the citations that the Examiner sets forth to provide support for injecting samples from the wells into the capillaries also fail to disclose such information.

The Examiner also refers to alleged disclosure in the priority application providing "wells including a capillary positioned therein." Applicants have considered Figures 1A and 8A and fail to see any wells that include a capillary "positioned therein." Clearly, a well refers to one feature of the invention and the capillary refers to another feature of that invention. Thus, in order for the art to anticipate the claimed invention, one must demonstrate from the prior art that a capillary is included within a well, Figures 1A and 8A fail to disclose such a capillary within a well. Furthermore, claim 14 has been amended to refer to the fact that the capillary is "fixedly" positioned therein. Neither of these figures demonstrates at least that aspect of the invention.

Because Adourian (and its respective priority document - the '798 application) fails to disclose several aspects of the claimed invention Adourian's priority document fails to support priority of the '031 patent as related to aspects of the claimed invention. Therefore, Adourian *is not* anticipatory art relative to the invention of claims 14 - 17, 20, 21, and 24. Because the cited art fails to anticipate the independent claims such art

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further fails to anticipate the invention of those claims dependent thereon. For all of the above reasons, the rejection is overcome and should be withdrawn.

In the Office Action, at page 4, the Examiner rejected claims 14-17, 20, 21, and 23 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Kambara et al. (U.S. Patent No. 5,968,331 - hereinafter "the '331 patent") in view of Lauer et al. (U.S. Patent No. 5,207,886 - hereinafter "the '886 patent."). Applicants respectfully traverse this rejection.

In the Office Action at page 5, the Examiner stated that:

Relevant to claim 14, Kambara et al disclose a method for sample handling in a capillary electrophoresis apparatus, comprising: providing a plurality of samples on coordinates of a work surface (Column 4, line 66 - Column 5, line 1; Column 5, lines 52 - 58); simultaneously transferring at least two samples from their respective work-surface coordinates to respective loading wells of a capillary electrophoresis chip (Figures 8 and 9, wells 23; Column 9, lines 24 - 29), wherein the wells include a capillary positioned therein (e.g. Figures 8 and 9, capillary 20 with gel 50 at the bottom of the well; Column 9, lines 1 - 9); and injecting the samples from the wells into the capillaries. (Column 9, lines 24 - 29).

Applicants disagree.

In making an obviousness rejection under 35 U.S.C. §103, the Examiner must provide *both* a motivation or suggestion to combine the cited art *and* a reasonable expectation of obtaining the claimed invention once the art has been combined. Neither of these criteria have been met.

In any event, use of the '886 patent in the rejection is now moot because Applicants have removed from independent claim 14, the recitation "wherein the temperature of the work surface is controlled by a temperature controller." As in the previous rejection, the Examiner is using

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the '886 patent only to provide the "temperature controller" aspect of claim 14 to the combination of references. Because the language referring to the temperature controller has been deleted, use of the '886 patent in the rejection is now moot.

Applicants have also amended claim 14 and the '331 patent fails to suggest, at a minimum, at least some aspects of the invention of claim 14 and those claims dependent thereon. Additionally, new claims 27 - 31 fail to be rendered obvious in view of the '331 and '886 patent. Therefore, this rejection is overcome and should be withdrawn.

In the Office Action at page 6, the Examiner rejected claims 14 -17, 20, and 21 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Briggs et al. (U.S. Patent No. 5,560,811 - hereinafter "the '811 patent") in view of Lauer et al. (U.S. Patent No. 5,207,886 - hereinafter "the '886 patent"). Applicants respectfully traverse this rejection.

The aspect of the rejection as it applies to the '886 patent is now moot because as noted above, the aspect of the claim to which the '866 patent refers has been deleted from the claim. Furthermore, as applied to the '811 patent, the rejection is also moot because Applicants have added the limitation from dependent claim 22 into independent claims 14 and 17. Therefore, this rejection is overcome and should be withdrawn.

The '811 patent also fails to suggest, at a minimum, at least some aspects of the invention of claim 14 and those rejected claims dependent thereon. Additionally, new claims 27 - 31 fail to be rendered obvious in view of the '811 and '886 patent. Therefore, this rejection is overcome and should be withdrawn.

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In the Office Action, at page 8, the Examiner rejected claims 14 - 21 and 23 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Kambara et al. (U.S. Patent No. 5,968,331 - hereinafter "the '331 patent") in view of Truchaud *et al.*, *Clin. Chem.* 43:9, 1709-1715 (1997). Applicants respectfully traverse this rejection.

As noted earlier in this Reply, Applicants have amended claim 14 and the '331 patent fails to suggest, at a minimum, at least some aspects of the invention of amended claim 14 and those rejected claims dependent thereon. Additionally, new claims 27 - 31 fail to be rendered obvious in view of the '331 and '886 patent.

Truchaud has been cited in an attempt to address aspects of the rejected claims that refer to temperature or humidity control. The use of Truchaud in the rejection is now moot because Applicants have removed from independent claim 14, the recitation "wherein the temperature of the work surface is controlled by a temperature controller." As in the previous rejection, the Examiner is using the Truchaud, at least in part, to provide this aspect of claim 14 to the combination of references. Applicants have also canceled claim 19 relating to cooling the work surface. Because the language referring to the temperature controller has been deleted, use of Truchaud in this aspect of the rejection is now moot.

The Examiner also relies on Truchaud at page 1712 in an attempt to support the rejection of claim 18, that recites "controlling the humidity of the environment surrounding the work surface to reduce sample evaporation." It is a "stretch" to argue that reference to regulation of "temperature or humidity" in a laboratory, renders obvious "controlling the humidity of the environment surrounding the work surface" as recited in the claimed invention. In any event,

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the Examiner has provided no motivation, whatsoever, to combine Truchaud with the '331 patent. Therefore, this rejection is overcome and should be withdrawn.

In the Office Action at page 9, the Examiner rejected claims 14-21 under 35 U.S.C. § 103(a) as being unpatentable over Briggs et al. (U.S. Patent No. 5,560,811 - hereinafter "the '811 patent") in view of Truchaud *et al.* Applicants respectfully traverse this rejection.

Applicants have already argued why the '811 patent in view of the '886 patent fails to render obvious the invention of claims 14-21. Applicants have also argued why Kambara in view of Truchaud fails to render obvious the invention of claims 14-21. For all of the same reasons, the '811 patent in view of Truchaud also fails to render obvious the invention of claims 14-21. Therefore, this rejection is overcome and should be withdrawn.

In the Office Action, at page 9, the Examiner also rejected claim 18 under 35 U.S.C. § 103(a) as being unpatentable over Adourian et al. (U.S. Patent No. 6,207,031 - hereinafter "the '031 patent") in view of either Ginsberg et al. (U.S. Patent No. 4,276,258 - hereinafter "the '258 patent") or Monthony et al. (U.S. Patent No. 5,182,082 - hereinafter "the '082 patent"). Applicants respectfully traverse this rejection.

This rejection relies on the assumption that the '031 patent is prior art to the claimed invention. Applicants have already argued in this Reply, beginning at page 6 that the '031 patent is not prior art. For the same reason that the '031 patent is not prior art as set forth earlier in this reply, the '031 patent is also not prior art in this rejection. Therefore, regardless of what the '258 or '082 patents suggest, the rejection must fail. Therefore, this rejection is overcome and should be withdrawn.

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In the Office Action, at page 10, the Examiner rejected claim 18 under 35 U.S.C. § 103(a) as being unpatentable over Kambara et al. (U.S. Patent No. 5,968,331 - hereinafter "the '331 patent") and Lauer et al. (U.S. Patent No. 5,207,886 - hereinafter "the '886 patent.") as applied to claim 14, and further in view of either Ginsberg et al. (U.S. Patent No. 4,276,258 - hereinafter "the '258 patent") or Monthony et al. (U.S. Patent No. 5,182,082 - hereinafter "the '082 patent). Applicants respectfully traverse this rejection.

The Examiner rejected claim 18 in view of the rejection of claim 14 as set forth above. Applicants have earlier in this Office Action argued why claim 14 should not be rejected over the '331 patent in view of the '866 patent. At a minimum, the same reasons apply to the rejection of claim 18. The '258 and '082 fail to remedy any of the deficits in the combination of Kambara in view of Lauer. Therefore, this rejection is overcome and should be withdrawn.

In the Office Action, page 11, the Examiner rejected claim 18 under 35 U.S.C. § 103(a) as being unpatentable over Briggs et al. (U.S. Patent No. 5,560,811 - hereinafter "the '811 patent") and Lauer et al. (U.S. Patent No. 5,207,886 - hereinafter "the '886 patent.") as applied to claim 14, and further in view of either Ginsberg et al. (U.S. Patent No. 4,276,258 - hereinafter "the '258 patent") or Monthony et al. (U.S. Patent No. 5,182,082 - hereinafter "the '082 patent). Applicants respectfully traverse this rejection.

The Examiner rejected claim 18 in view of the rejection of claim 14 as set forth above. Applicants have earlier in this Reply argued why claim 14 should not be rejected over the '811 patent in view of the '866 patent. At a minimum, the same reasons apply to the rejection of



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claim 18. The '258 and '082 patents fail to remedy any of the deficits in the combination of the '811 and of the '866 patent. Therefore, this rejection is overcome and should be withdrawn.

In the Office Action, at page 11, the Examiner also rejected claims 18 and 19 under 35 U.S.C. § 103(a) as being unpatentable over Adourian et al. (hereinafter "the '031 patent") in view of Truchaud. Applicants respectfully traverse this rejection.

This rejection relies on the assumption that the '031 patent is prior art to the claim invention. Applicants have already argued in this Reply at beginning page 6 that the '031 patent is not prior art. For the same reason that the '031 patent is not prior art as set forth earlier in this Reply, the '031 patent is also not prior art in the rejection. Regardless of what Truchaud suggests, the rejection must still fail because the '031 patent is not prior art. Therefore, this rejection is overcome and should be withdrawn.

In the Office Action, at page 12, the Examiner rejected claims 18 and 19 under 35 U.S.C. § 103(a) as being unpatentable over Adourian et al. (hereinafter "the '031 patent") in view of Hansen et al. (U.S. Patent No. 5,508,197 – hereinafter the '197 patent"). Applicants respectfully traverse this rejection.

This rejection relies on the assumption that the '031 patent is prior art to the claim invention. Applicants have already argued in this Reply beginning at page 6 that the '031 patent is not prior art. For the same reason that Adourian is not prior art as set forth earlier in this reply, the '031 patent is also not prior art here. Regardless of what '197 patent suggests, the rejection must fail because the '031 patent is not prior art. Therefore, this rejection is overcome and should be withdrawn.

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In the Office Action, at page 14, the Examiner also rejected claims 22, 23, 25, and 26 under 35 U.S.C. § 103(a) as being unpatentable over Adourian et al. (hereinafter "the '031 patent") in view of Lewis. Applicants respectfully traverse this rejection.

This rejection relies on the assumption that the '031 patent is prior art to the invention of claims 22, 23, 25, and 26. Applicants have already argued in this Amendment and Reply beginning at page 6 hereof that the '031 patent is not prior art. For the same reason that the '031 patent is not prior art as set forth earlier in this reply, the '031 patent is also not prior art in this rejection. Regardless of what Lewis suggests, the rejection must fail because the '031 patent is not prior art. Therefore, this rejection is overcome and should be withdrawn.

#### CONCLUSION

In view of the foregoing remarks, Applicants respectfully request favorable reconsideration of the present application and a timely allowance of the pending claims.

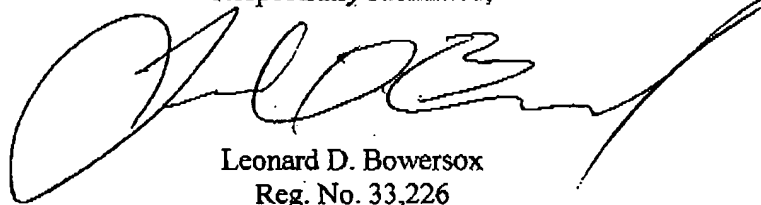
Should the Examiner deem that any further action by Applicants or Applicants' undersigned representative is desirable and/or necessary, the Examiner is invited to telephone the undersigned at the number set forth below.

If there are any fee(s) due in connection with the filing of this response, please charge the fee(s) to Deposit Account No. 50-0925. If a fee is required for an extension of time under 37

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C.F.R. § 1.136 not accounted for above, such extension is requested and should also be charged to  
said Deposit Account.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'L. Bowersox', with a large, stylized initial 'L' and a long, sweeping horizontal stroke at the end.

Leonard D. Bowersox  
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